Impact of Internal Governance On a CEO's Investment Cycle

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Introduction - What is internal governance?

- External Governance
  - Board of Directors and Committee Structure (Gompers, Ishii and Metrick, 2003; Bebchuk, Cohen, Ferrell, 2008)
  - Compensation package design (Bertrand and Mullainathan 2001; Garvey and Milbourn 2003)
  - Blockholders and Institutional Investors
  - Market takeover pressures and Activist Hedge Fund Investors
- Internal governance
  - Conceptually defined by Acharya, Myers and Rajan (2011) and Landier, Sauvagnat, Sraer and Thesmar (2012)
  - The effectiveness of internal governance depends on the relative contribution to the current cash flows of the firm between CEO and her subordinates within the management team.

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Agency Problem and Executive Horizon

- Agency Problem
  - Unless CEO owns 100% of the firm, there will be conflicts of interests between CEO and shareholders (Jensen and Meckling 1976).
  - CEO tends to consume perquisites through investment projects divergent from maximizing shareholder wealth.

- Executive Horizon
  - Driven by the inefficiency of compensation structure, CEO tends to myopically select investment projects that boosts her current income.
  - Age and distance to retirement are widely used as proxies for executive horizon. Older CEOs and CEOs near transition are naturally of short executive horizon.
  - The shorter the executive horizon of the CEO, more acute become the agency problem.

Internal Governance I

- Conceptualized in Acharya, Myers and Rajan (2011).
- A theory about power distribution among top management team and a mechanism through which lieutenant managers effectively constrain the myopic behavior of the CEO.
- When CEO is myopic and of short horizon, good internal governance is a necessity to mitigate agency problem complementary to other governance forces such as Board of Directors. Internal governance and external governance are endogenously determined.

Internal Governance II

- In face of myopic CEO, Internal governance is deemed good when the distribution of cash-relevant tasks between CEO and her immediate subordinates are balanced to some degree, i.e., CEO is neither dominating nor powerless.
- A number of empirical paper have found that internal governance is beneficial as it increases the firm's profitability and stock returns after acquisitions (Landier, et. al (2012)), increases stock market liquidity (Jain, Jiang, and Mekhaimer (2016)), and reduces real earnings management (Cheng, Lee and Shevlin (2016)).

CEO Investment Cycle I

- CEO plays a central role in making investment decisions. (Thomas and Simerly, 1994, Bertrand and Schoar, 2003 and Baker and Wurgler, 2013)
- Firm performance surrounding CEO turnover changes drastically. Coughlan and Schmidt (1985), Warner, Watts and Wruck (1988), Weisbach (1988), and Parrino et al. (2002), provide strong empirical evidence that both the accounting earnings and market value of the firm decline before the departure of CEO. Parrino et al. (2002) find that the firm performance improves following the CEO dismissal is positively related to the appointment of an outsider CEO and the presence of effectively-monitoring board.

CEO Investment Cycle II

- Investment policy is shaken during transition period: asset divestures and write-offs increase, as well as capital expenditures reduce (Elliott and Shaw 1988, Dechow and Sloan 1991, Murphy and Zimmerman 1993, and Weisbach 1993).
- Investment rate increases over a CEO's tenure, whereas disinvestment decreases (Pan, Wang and Weisbach (PWW), 2016)

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Key Research Questions I

Q1

Given myopic CEO, is there a hump-shape relationship between internal governance measure and firm performance?

- The key theoretical implication of Acharya, Myers and Rajan (2011).

Q2

In face of older CEO near transition (short executive horizon), would good internal governance mitigate the cyclical turbulence of long term investment policy?

- PWW's results of CEO Investment Cycle
- The cyclical variation of investment policy is indicative of a intrinsically suboptimal condition of corporate management.

Key Research Questions II

Q3

Is asset divesture and disinvestment at the beginning of a CEOs' tenure a agency problem or not? If so, would internal governance help?

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Main Findings

- Uncover a hump-shape relationship between firm performance and internal governance measure, in line with Acharya, Myers, and Rajan (2011) and Aggarwal, Fu and Pan (2017).
- Replicate the results of CEO Investment Cycle in Pan, Wang and Weisbach (2016) (PWW) and document that when internal governance is deemed good, the cyclical change in longer term investment is reduced for older CEO before turnover.
- Good internal governance does help with over-or under-investment during the CEO transition period.
- Evidence indicates that asset disposal that happens at the beginning of a CEO's tenure is more likely due to skill set mismatch rather than a agency problem.
- Good internal governance helps incoming CEOs get rid of less profitable investments previously made by older predecessors at less loss or perhaps even a gain.

Contributions

- Methodologically improve the specification of internal governance measure.
- Documents empirical evidence in support of the theory of internal governance.
- Sheds light on the important role of internal governance in mitigating the agency problem and cyclical change of investment policy during the intensive interest conflict period of CEO transition.

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Internal Governance I

- Aggarwal, Fu and Pan (2017)
  - Use executive titles carried by each executives in the top management team as the proxy for the cash-relevant tasks in the theoretical work in Acharya et al (2011).
  - Download the annual executive title (titleANN) for each executive from Execucomp.
  - Split title strings by 4 delimiters: 1) "," 2) ";" 3) "&" 4) "and"
  - The method will result in misspecification. For example,

Executive Name	Company	Title string	Title number	Fiscal Year
Mark McDonald	AAR Corp	group vp-structures & systems, maintenance, repair and overhaul	1	2004

  - Our solution: Use regular expression or ReGex in R
  - Regular expression or regex, is a special string representation abstracting and describing a certain common pattern of multiple strings.

Internal Governance II

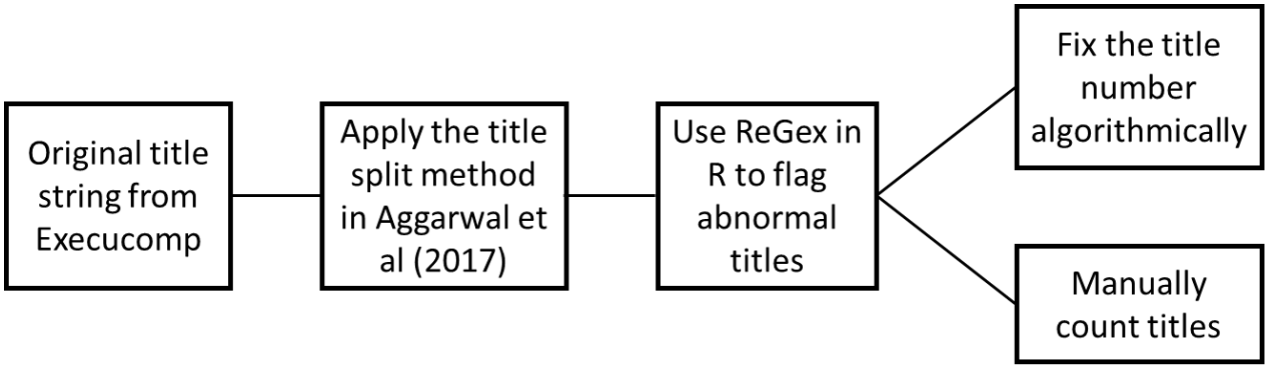
- Regular Expression (ReGex) in R

ReGex \ Examples	Title String and Regex code	Title Number
[1] "of … and …"	"Senior Vice President of Proprietary Pharmaceutical Products and Global Commercial Operations"	1
	of\\s.+(((\\s|)&)|\\sand)	
[2] "of… [,]… and"	"senior vp;managing director of Europe, Middle East and Africa"	2
	of\\s(\\w+).+[,].+(((\\s|)&)|\\sand)	
[3] " of … and … and"	"Executive Vice President of Law & Government and Secretary"	2
	of\\s.+(((\\s|)&)|\\sand)\\s.+(((\\s|)&)|\\sand)\\s\\w+	
[4] " of … and … of"	"Chief Compliance Officer, Senior Vice President, General Counsel, Chief Compliance Officer of American Airlines Inc, Senior Vice President of American Airlines Inc and General Counsel of American Airlines Inc"	6
	of\\s.+\\s(&|and).+\\sof\\s	
[5] "… and … officer or head"	"Executive VP, CFO and Principal Financial & Accounting Officer"	3
	([Cc]hief|[Cc]hf.|[Cc]hf|[Ss]r.|[Ss]r|[Gg]rp.|[Gg]rp|[Gg]roup|[Pp]rincipal|[Pp]rin.|[Pp]rin) ((\\w+(.))|((\\w+(.))\\s(\\w+(.)))) (&|and) ((\\w+(.))|((\\w+(.))\\s(\\w+(.)))) ([Oo]fficer|[Oo]ffr.|[Oo]ffr|[Oo]fr.|[Oo]fr|[Oo]ff|[Oo]ff.|[Hh]ead)	

Five most common patterns and building blocks

Internal Governance III

- Data process procedures



- Example of fixing automatically

[2] "of… [,]… and"	2003	Alan J. Black	GREAT ELM CAPITAL GROUP INC	"senior vp;managing director of Europe, Middle East and Africa"	2

  - Identified purely by the second regular expression and no executive titles after "of"
  - The number of titles = 4 (number of split parts) - 2(number of commas + 1) = 2

- Example of manually counting

[1]+[2]+[3]+[4]	"Chief Technology Officer, Senior Vice President of Operations, Engineering & Technology and Member of Executive Council"	3

  - A combination of regular expressions

Variables of interest

- Relative contribution measure (δ)
  - $\delta = \frac{f}{f+g}$, in which f and g are cash-flow relevant tasks assigned to CEO and subordinate managers.
  - We select top four well paid managers from the management team besides CEO
  - We consider manager's compensation as base salary plus bonus.
- Effective Internal governance (IG)
  - A dummy variable that takes value one if the relative contribution of CEO to other subordinates is within the optimal range for internal governance.
  - The determination of optimal range will be introduced in methodology section.

Dependent variables I

- Firm performance
  - Accounting performance (Ind-adj. ROA)

    ROA = Net Income/ book value of assets at the beginning of the period (lagged)
  - Market performance (Ind-adj. M/B)

    M/B= Market value of equity/ book value of equity at the beginning of the period (lagged)
  - Both performance measures are 2-digit SIC industry adjusted (minus median level) and winsorized at 1
  - M/B is a better measure for growth potential and strategic management (Chakravarthy, 1986).

Dependent variables II

- Investment policy (Follow Pan, Wang and Weisbach , 2016)
  - Investment rate = Capital expenditures rate + acquisition rate

    Capx Rate = Capital expenditures/ total assets at the beginning of the period (lagged).

    Acquisition rate = acquisitions/ total assets at the beginning of the period (lagged).
  - Asset disposal rate

    SPPE Rate = Property sales/ total assets at the beginning of the period (lagged).

    SPPIV Rate = Gains or Losses of Property Sales / total assets at the beginning of the period.

Samples I

- Full sample (1996-2017)
  - Board characteristics start from 1996.
  - Merge data from Compustat, Execucomp and ISS.
  - Examine research Question 1.
- Samples of transition
  - Select data in various ranges in transition period (defined as two years before (-2) to two years after (+2) the inauguration year (0))
  - Examine research Question 2 and 3.
- We also include other firm characteristics as controls (lagged) such as lagged market performance, total assets, leverage, R&D, and board characteristics.The firm, CEO and Board characteristics data are from Compustat, Execucomp and ISS.

Samples II

Size of the Sample

- The final sample consists of 32,114 firm-year observations.
- The sample spans fiscal years 1996 to 2017, covers 3,529 CEO turnovers, and 3,343 distinct firms for a total of 6,612 unique CEO-firm combinations.
- The average fraction of corporate titles of CEO is 0.261, which is 7
- The sample distribution of d is quite symmetric with extreme values ranging from smallest 0.055 to largest 0.643, 1
- We have roughly similar means, medians and standard deviations to those Pan,Wang and Weisbach (2016), and Aggarwal, Fu and Pan (2017).

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Summary Statistics

	N	Mean	Median	p25	p75	Std. Dev.	Skewness	Kurtosis
δ	32114	0.262	0.25	0.222	0.3	0.069	0.551	3.787
δ^2	32114	0.073	0.063	0.049	0.09	0.039	1.52	7.197
ROA	29778	0.067	0.038	-0.004	0.121	0.176	-10.083	357.56
M/B	29245	1.172	0.422	-0.238	1.68	4.166	2.018	37.561
Leverage	31703	0.246	0.222	0.071	0.359	0.246	14.685	878.622
Size	29480	7.738	7.633	6.516	8.861	1.722	0.365	3.27
Size2	29480	62.839	58.256	42.462	78.524	28.062	1.079	5.087
R&D	29317	0.033	0	0	0.032	0.08	7.114	101.603
Directors	22506	9.484	9	8	11	2.51	0.963	6.301
Outsiders	22506	0.715	0.778	0.6	0.875	0.196	-1.013	3.302
Investments	17073	0.102	0.058	0.026	0.117	0.172	8.588	160.441
Age	29658	55.644	56	51	60	7.136	0.244	3.758
Sppe	20722	0.004	0	0	0.002	0.033	75.747	8372.471
Sppiv	26879	-0.003	0	-0.001	0	0.048	-73.912	7332.092
pps	27334	0.942	0.18	0.065	0.493	8.553	37.39	1805.464

Model, Empirical Design and Methodology I

- The model (Acharya et al, 2011)

$$k^{ss} = [\gamma(1-\delta)\delta^{b-1}\frac{\theta^b}{(1+r)^{b-1}}]^{\frac{1}{1-\gamma b}}$$

  - In which k^{ss} is steady state investment, which is positively related to firm performance;$b > 1, 1 - \gamma b > 0$; and the key variable is δ denotes the fraction of cash flow relevant tasks assigned to the CEO.
  - $\delta = \frac{f}{f+g}$, in which f and g are tasks assigned to CEO and subordinate mangers.

Model, Empirical Design and Methodology II

- FOC of k^{ss} w.r.t δ:

$$\frac{\partial k^{ss}}{\partial \delta} = [\gamma(1-\delta)\delta^{b-1}\frac{\theta^b}{(1+r)^{b-1}}]^{(\frac{1}{1-\gamma b-1})}[\delta^{b-1}((b-1)(1-\delta)\delta^{-}1)-1][\gamma\frac{\theta^b}{(1+r)^{b-1}}]$$

- The sign of the comparative static is determined by the middle parentheses.
- Indicates a hump-shaped or reverted U-shape relationship between and firm performance.

Model, Empirical Design and Methodology III

- Stage I
  - Specify the reverted U-shape relationship between firm performance

$$OutcomeVariable_i t = \beta_0 + \beta_1 \delta_i t + \beta_2 \delta_{it}^2 + \beta_2^{'} x_{it} + \gamma_i + \lambda_t + \epsilon_{it}$$

  - Outcome variable is the level of firm performance as measured by Tobin's Q or ROA; is the relative contribution measure; x_{it}a vector of firm level covariates, and γ_i and λ_t are firm and year fixed effects, respectively.
  - We include δ^2 the econometric model to capture the hump-shaped curvature indicated by the theoretical model in Acharya et al (2011).

Model, Empirical Design and Methodology IV

- Stage I
  - Determine the effective internal governance

$$\max_{\delta} \quad OutcomeVariable = \beta_0 + \beta_1\delta + \beta_2\delta^2 + \beta_2 x + \gamma + \lambda + \epsilon$$

  - FOC: $\frac{\partial OutcomeVariable}{\partial \delta} = b_1 + 2b_2\delta = 0; \delta^* = -\frac{b_1}{2b_2}$
  - Optimal range of relative contribution:

$$(\delta^* - \frac{1}{2}\sigma_\delta, \delta^* + \frac{1}{2}\sigma_\delta)$$

σ_δ denotes the sample standard deviation of internal governance measure.

Regression of Firm Performance on Internal Governance for Younger CEOs

	ROA	ROA	M/B	M/B
δ	0.130*	0.056	-0.854	-1.640
	(1.91)	(0.84)	(-0.22)	(-0.33)
δ^2	-0.183*	-0.069	3.204	4.156
	(-1.65)	(-0.64)	(0.51)	(0.52)
ROA	0.282***	0.434***		
	(4.49)	(8.66)		
M/B			0.243***	0.258***
			(6.00)	(4.59)
Size	-0.059***	-0.068***	-2.041***	-0.967*
	(-3.84)	(-4.31)	(-4.43)	(-1.84)
Size2	0.002*	0.002*	0.089***	0.020
	(1.71)	(1.70)	(3.11)	(0.64)
Leverage	0.007	0.002	-1.670**	-1.684**
	(0.54)	(0.21)	(-2.55)	(-2.15)
R&D	0.024	0.004	0.665	0.303
	(0.66)	(0.05)	(0.73)	(0.22)
Directors		0.001		-0.037
		(1.15)		(-1.15)
Outsiders		-0.004		0.512*
		(-0.50)		(1.80)
Year fixed-effects	yes	yes	yes	yes
Firm fixed-effects	yes	yes	yes	yes
R2	0.816	0.844	0.495	0.548
Adj.R2	0.717	0.796	0.360	0.409
N	10691	7736	10650	7756

Regression of Firm Performance on Internal Governance for Older CEOs

	ROA	ROA	M/B	M/B
δ	0.211***	0.060	5.057**	7.836***
	(3.85)	(1.13)	(2.05)	(3.06)
δ^2	-0.320***	-0.066	-8.696**	-12.037***
	(-3.57)	(-0.75)	(-2.02)	(-2.79)
ROA	0.377***	0.489***		
	(7.03)	(23.03)		
M/B			0.327***	0.375***
			(6.72)	(5.88)
Size	-0.001	-0.050***	-0.687*	-0.424
	(-0.03)	(-4.42)	(-1.87)	(-0.96)
Size2	-0.002	0.000	0.007	-0.010
	(-0.83)	(0.67)	(0.32)	(-0.35)
Leverage	-0.023*	-0.001	-1.301***	-1.283*
	(-1.95)	(-0.05)	(-2.90)	(-1.78)
R&D	0.082	-0.136***	4.483	1.437
	(0.95)	(-3.00)	(1.60)	(0.84)
Directors		0.000		-0.051
		(0.01)		(-1.62)
Outsiders		-0.001		0.448
		(-0.17)		(1.44)
Year fixed-effects	yes	yes	yes	yes
Firm fixed-effects	yes	yes	yes	yes
R2	0.814	0.847	0.556	0.607
Adj.R2	0.780	0.817	0.475	0.529
N	11470	8822	11391	8812

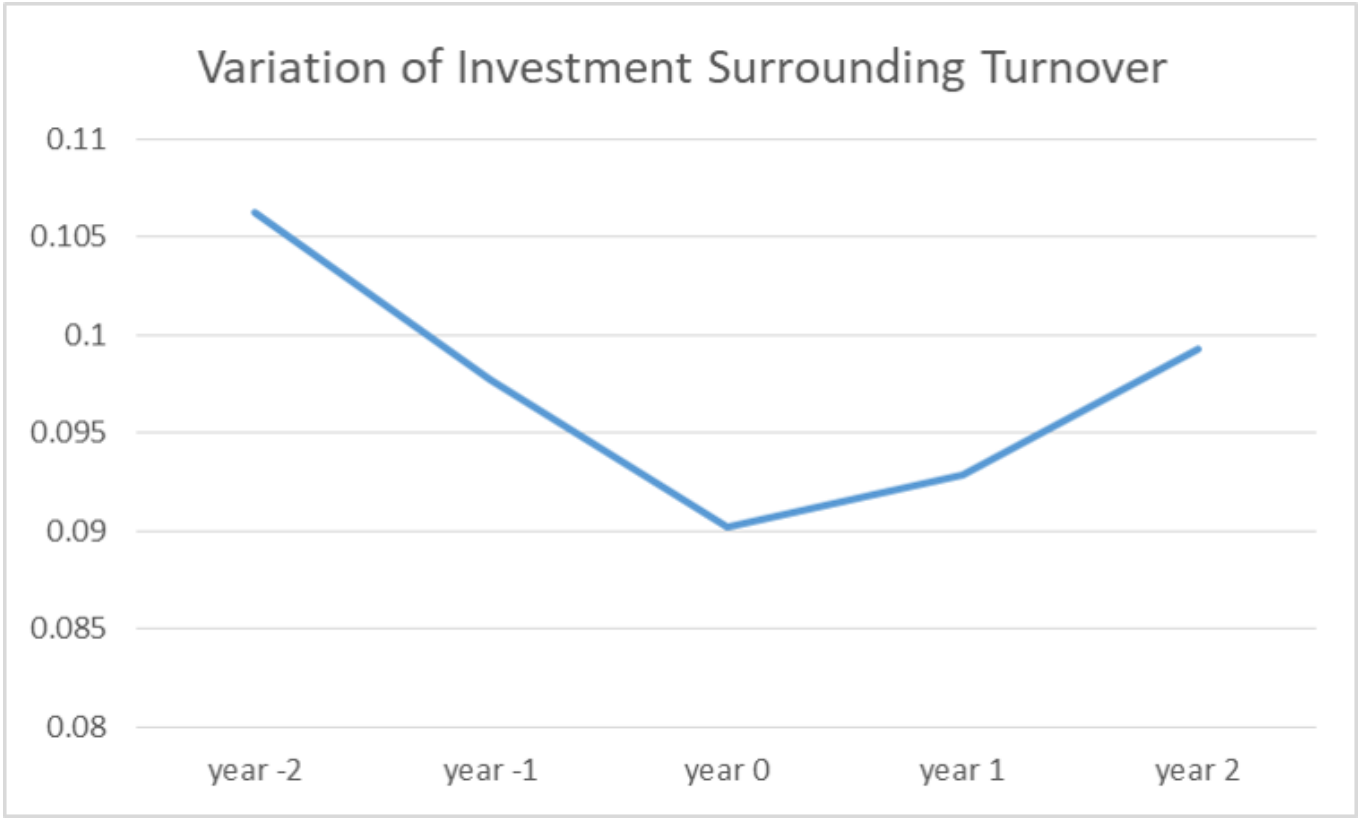
Model, Empirical Design and Methodology V

- Stage II
  - Test the influence of internal governance on investment policy in the transition period of CEO.

$$\Delta InvestmentPolicy = \beta_0 + \beta_1 IG + \beta_2' x_{it-1} + \gamma_i + \lambda_t + \epsilon_{it}$$

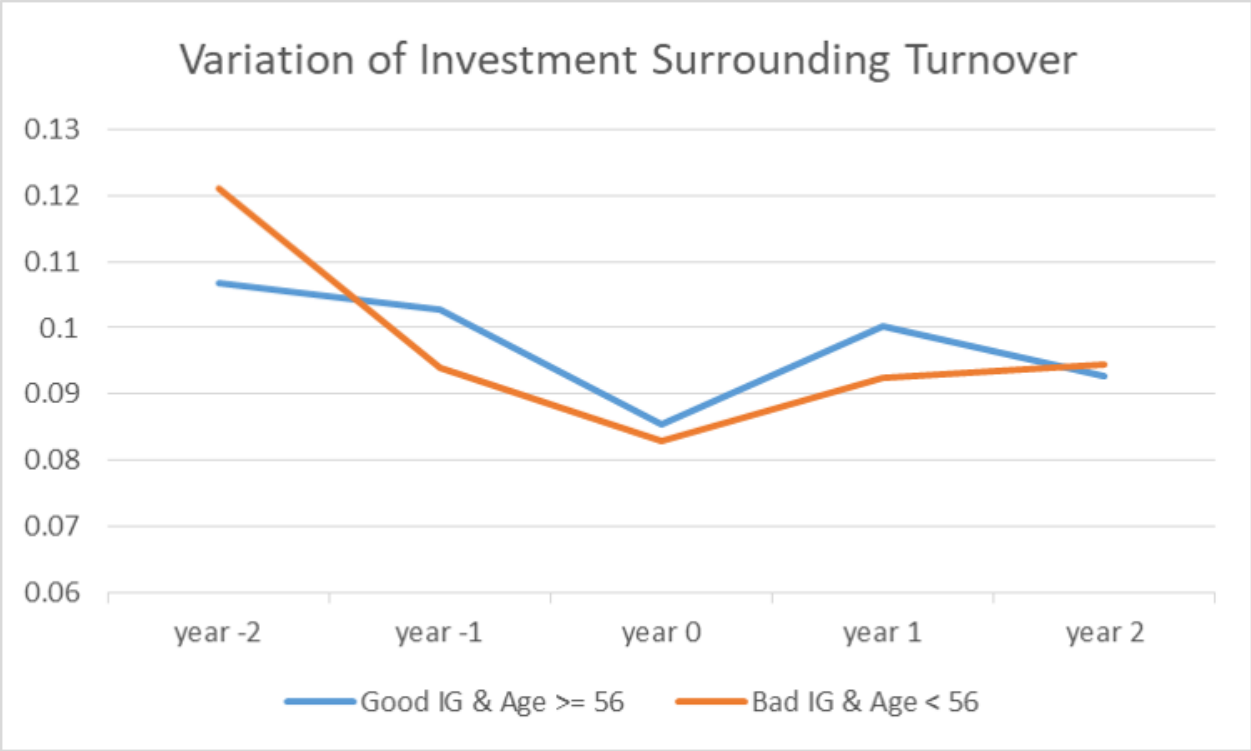
  - The dependent variable is change of Investment Rate, SPPE Rate and SPPIV Rate for testing questions 1, 2 and 3 respectively.
  - IG the dummy variable of effective internal governance.
  - We also include lagged change of firm controls and firm and year fixed effect dummies

Univariate and Graphical Analysis I



	The Whole Sample (96-17)			
	(-2,-1)	(-2,0)	(-2,1)	(-2,2)
Investments	0.009*	0.016***	0.013**	0.007
	(1.71)	(3.15)	(2.46)	(1.21)

Univariate and Graphical Analysis II



	(-2,-1)	(-2,0)	(-2,1)	(-2,2)
Older CEOs and Good Internal Governance (IG=1)				
Investment	0.004 (0.294)	0.021 (1.657)*	0.007 (0.458)	0.014 (1.199)
Older CEOs and Good Internal Governance (IG=0)				
Investment	0.027** (2.09)	0.038*** (3.00)	0.028** (2.10)	0.027* (1.87)

Multivariate Analysis

Stage II – Q2

	Change in Investments (-2,0)			
	Younger CEOs		Older CEOs	
	(1)	(2)	(3)	(4)
IG	-0.085**	-0.049	-0.123***	-0.132***
	(-2.24)	(-1.15)	(-3.57)	(-3.16)
Lagged M/B	0.015**	0.007	0.002	0.003
	(2.58)	(1.24)	(0.69)	(1.22)
Size	0.073	0.055	0.093***	0.120***
	(1.51)	(0.73)	(3.15)	(2.92)
Leverage	0.299	0.739***	0.370***	0.472***
	(1.19)	(2.64)	(2.58)	(3.80)
R&D	0.189	-2.725*	-0.239	0.779
	(0.77)	(-1.67)	(-0.26)	(1.15)
Directors		0.072***		-0.017*
		(3.39)		(-1.77)
Outsiders		0.230		0.083
		(0.95)		(0.68)
Year fixed-effects	yes	yes	yes	yes
Firm fixed-effects	yes	yes	yes	yes
R2	0.766	0.862	0.716	0.764
Within R2	0.334	0.418	0.180	0.222
Within adj.R2	0.306	0.377	0.160	0.195
N	577	394	1042	767

Multivariate Analysis

Stage II – Q2

	Change in Investments (0, 2)			
	Younger CEOs		Older CEOs	
	(1)	(2)	(3)	(4)
IG	-0.000	0.022	0.016	0.031
	(-0.02)	(0.62)	(0.71)	(1.18)
M/B	0.007	-0.009	-0.002*	-0.007*
	(0.88)	(-0.71)	(-1.76)	(-1.87)
Size	0.119***	0.064	0.022	-0.022
	(3.04)	(1.30)	(0.97)	(-0.60)
Leverage	0.161	0.385*	0.208***	0.202*
	(1.22)	(1.96)	(2.60)	(1.68)
R&D	0.008	-0.011	0.639	0.501
	(0.17)	(-0.19)	(1.38)	(1.23)
Directors		0.059**		-0.008
		(2.05)		(-1.12)
Outsiders		-0.198		0.142
		(-1.50)		(1.48)
Year fixed-effects	yes	yes	yes	yes
Firm fixed-effects	yes	yes	yes	yes
R2	0.855	0.855	0.837	0.859
Within R2	0.260	0.339	0.177	0.214
Within adj.R2	0.231	0.294	0.154	0.179
N	584	584	782	573

Multivariate Analysis

Stage II – Q2

	Sppe at t=0			
	Younger CEOs		Older CEOs	
	(1)	(2)	(3)	(4)
IG	0.001	-0.003*	0.005	0.009
	(0.81)	(-1.73)	(1.23)	(1.56)
M/B	-0.000	-0.000**	0.001**	0.001
	(-0.19)	(-2.08)	(2.25)	(1.58)
Size	0.002	0.001	0.002	0.002
	(0.62)	(0.21)	(0.53)	(0.35)
Leverage	-0.014	0.025***	0.041***	0.061**
	(-0.98)	(2.63)	(3.24)	(2.17)
R&D	0.059	0.043	-0.009	0.070
	(1.50)	(1.50)	(-0.14)	(0.85)
Directors		-0.000		-0.002
		(-0.29)		(-0.91)
Outsiders		0.047***		-0.023
		(2.97)		(-1.53)
Year fixed-effects	yes	yes	yes	yes
Firm fixed-effects	yes	yes	yes	yes
R2	0.899	0.989	0.649	0.649
Within R2	0.143	0.555	0.145	0.208
Within adj.R2	0.095	0.514	0.117	0.170
N	457	308	762	568

Multivariate Analysis

Stage II – Q3

	Sppiv at t=0			
	Younger CEOs		Older CEOs	
	(1)	(2)	(3)	(4)
IG	0.003	0.003	-0.008***	-0.008***
	(1.21)	(0.59)	(-3.60)	(-3.14)
M/B	0.000	-0.000	-0.000	-0.000
	(0.39)	(-0.46)	(-0.29)	(-0.29)
Size	-0.001	-0.007	0.005***	0.008***
	(-0.72)	(-1.54)	(3.48)	(3.49)
Leverage	0.004	0.018	-0.003	-0.004
	(0.47)	(0.82)	(-0.55)	(-0.33)
R&D	0.008	0.121	0.051	-0.046
	(0.71)	(1.13)	(0.94)	(-0.74)
Directors		0.000		-0.001
		(0.01)		(-1.18)
Outsiders		0.018		0.021*
		(0.59)		(1.79)
Year fixed-effects	yes	yes	yes	yes
Firm fixed-effects	yes	yes	yes	yes
R2	0.875	0.729	0.753	0.774
Within R2	0.193	0.251	0.090	0.127
Within adj.R2	0.157	0.198	0.069	0.097
N	572	390	1079	804

Robustness Check

- Nature of transition – Endogeneity Issues
  - CEO turnover event has endogenous feedback to both firm policy and power balance.
  - It is possible that firms with poor firm performance are more likely to oust the CEO (see, for example, Hatfield, Worrell, Davidson and Bland, 1999, Huson, Parrino, and Starks, 2001). Forced turnovers are more likely to have unbalance power and greater change in policy.
  - Outsiders are more likely to alter the balance the power and change policy direction.
- Natural experiment
  - Use CEO sudden death as a natural exogenous shock upon the firm operation and the power distribution of the management.
  - Collect and identify sudden death events of news reports via Factiva.
  - Widely used in literature as a identification strategy complementary to the CEO turnover event.
  - Small sample due to limited amount news report.

Natural Experiment

Robust Regressions			
	CAPX	Acquisitions	Investments
	(1)	(2)	(3)
IG	-0.061	-0.016	-0.120
	(-2.745)**	(-3.215)***	(-10.779)***
Size	-0.001	0.006	0.015
	(-0.140)	(3.816)***	(4.382)***
Leverage	0.071	-0.004	-0.012
	(1.074)	(-0.292)	(-0.364)
R&D	-0.006	-0.001	0.015
	(-0.025)	(-0.028)	(0.129)
R2	0.475	0.642	0.922
Adj. R2	0.300	0.523	0.895
N	17	17	17

Voluntary turnover and Outsider

	Change in Investments (-2,0)					
	All turnover			Voluntary turnover only		
	(1)	(2)	(3)	(4)	(5)	(6)
Outsider Successor	-0.068***	-0.057**	-0.176***	-0.094***	-0.054*	-0.189***
	(-2.84)	(-2.42)	(-4.10)	(-3.02)	(-1.73)	(-3.59)
IG	-0.111***	-0.119***	-0.061***	-0.090***	-0.096***	-0.070***
	(-3.40)	(-2.92)	(-2.80)	(-2.79)	(-2.67)	(-3.11)
M/B	0.001	0.003	-0.005***	-0.001	0.001	-0.004***
	(0.36)	(1.06)	(-3.13)	(-0.29)	(0.35)	(-3.19)
Size	0.084***	0.122***	0.089***	0.069***	0.095***	0.115***
	(3.01)	(2.99)	(4.82)	(2.79)	(2.87)	(4.93)
Leverage	0.388***	0.476***	0.316***	0.363**	0.483***	0.294***
	(2.74)	(3.95)	(4.51)	(2.40)	(3.88)	(3.56)
R&D	-0.154	0.770	2.252***	-1.275	1.241	2.426***
	(-0.17)	(1.12)	(6.22)	(-0.96)	(1.36)	(5.62)
Directors		-0.017*	-0.001		-0.011	-0.007
		(-1.73)	(-0.10)		(-1.41)	(-0.94)
Outsiders		0.076	-0.110		0.009	-0.080
		(0.64)	(-1.54)		(0.07)	(-0.98)
pps			-0.007			-0.006
			(-1.03)			(-0.85)
Year fixed-effects	yes	yes	yes	yes	yes	yes
Firm fixed-effects	yes	yes	yes	yes	yes	yes
R2	0.720	0.768	0.960	0.739	0.831	0.687
Within R2	0.197	0.237	0.656	0.247	0.286	0.668
Within adj.R2	0.177	0.209	0.636	0.226	0.257	0.964
N	1042	767	509	927	683	481

Conclusion

- We demonstrate that the cyclical change in investment policy for old and myopic CEO is less likely to occur during the transition period if the firm prior to the CEO turnover event had effective internal governance.
- The empirical evidence implies that the asset disposal that happens at the beginning of a CEO's tenure is more likely due to skill set mismatch.
- We find that good governance helps incoming CEOs get rid of less profitable investments previously made by older and myopic predecessors at less loss or perhaps even a gain.
- A natural experiment of sudden death in a small sample generates results consistent with our main finding.
- The paper sheds light on the important role of the internal governance in mitigating the agency problem during the intensive interest conflict period of CEO transition.